FAO

Air Quality Division

How do I become certified to evaluate visible emissions (opacity) in accordance with EPA **Reference Method 9?**

You go to "smoke school." The Michigan Department of Environmental Quality coordinates smoke school with a private trainer, Eastern Technical Associates (ETA). Their web site is <u>www.eta-is-opacity.com</u>. ETA provides training in Michigan for those needing to become certified to evaluate visible emissions in accordance with EPA Reference Method 9. Those certified will be able to identify the opacity (see definition below) of the visible emissions from smoke stacks. Smoke school is offered every spring and fall in the Grand Rapids and Detroit metropolitan areas. You may contact ETA directly to learn of smoke schools being offered in other nearby states.

The cost of smoke school training is approximately \$400 for individuals who have never received certification and approximately \$250 for individuals who have been certified at previous smoke schools and, therefore, only need to attend the field session.

Definition of Opacity

Opacity is a measurement of how dense the dust particles are in the air and takes into account how much light is obscured by the rising dust when looking at a solid, colored background. Opacity is measured in percentages from 0 to 100 percent, and measurement is actually performed by visible observation. When there is no visible smoke, the opacity is 0 percent, meaning all of the light around a crushing operation is able to pass through. Therefore, when the statement is made that an activity is operating at a "25 percent opacity" level, that means that the dust, soot, and smoke levels are blocking only 25 percent of the visual background light, leaving 75 percent of the background light clearly visible. An example of standard opacity levels is illustrated by the figure below. The more dust or smoke that is generated, the more difficult it is to see the landscape background.

Figure 1 Opacity Levels

